A large industrial pipeline system, likely made of steel, runs diagonally across the frame from the bottom right towards the center. The pipes are dark grey or black with visible vertical ridges. In the background, there's a lush green landscape with several large trees, a body of water, and a small building on a hill. The sky is blue with some white clouds.

# Hudson Bay Mining and Smelting Co., Limited

annual report 1975



## Hudson Bay Mining and Smelting Co., Limited

### Head Office

P.O. Box 28, Toronto-Dominion Centre,  
Toronto, Ontario M5K 1B8

### Transfer agents

The Royal Trust Company —  
Montreal, Toronto, Winnipeg,  
Regina, Calgary, Vancouver.  
Morgan Guaranty Trust Company  
of New York — New York, N.Y.

### Registrars

Montreal Trust Company —  
Montreal, Regina.  
Crown Trust Company —  
Toronto, Winnipeg, Calgary, Vancouver.  
The Chase Manhattan Bank — New York, N.Y.

### Contents

Directors and Officers	inside front cover
Report of Directors	1-4
Review of operations	
Metals	5-8
Fertilizers/chemicals	9-10
Oil/gas	11-12
Manufacturing	13
Financial Reports	
Financial statements	14-16
Notes to financial statements	17-21
Auditors' report	21
Financial review	22-23
Principal addresses	24
Corporate holdings	24

**Cover:** A section of Petromer Trend's Kasim marine terminal in Irian Jaya, Indonesia, where oil from several fields is treated and stored in tanks prior to being piped into huge ocean-going tankers.

### Directors

- \*H.R. Fraser, Toronto  
Chairman, Hudson Bay Mining
- J. L. Carpenter, Toronto  
Executive Vice-President, Hudson Bay Mining
- \*H. P. Crawford, Q.C., Toronto  
A Senior Partner, Osler, Hoskin & Harcourt  
Barristers and solicitors
- M.B. Hofmeyr, London  
Managing Director, Charter Consolidated Limited  
A mining-finance house
- R.H. Jones, Winnipeg  
President and Chief Executive Officer,  
The Investors Group  
A financial holding company
- \*A.T. Lambert, Toronto  
Chairman and Chief Executive Officer,  
The Toronto-Dominion Bank  
A Canadian chartered bank
- H.C.F. Mockridge, Q.C., Toronto  
A Senior Partner, Osler, Hoskin & Harcourt
- \*W.A. Morrice, Toronto  
President, Hudson Bay Mining
- G.W.H. Relly, Johannesburg, South Africa  
Executive Director, Anglo American Corporation of  
South Africa Limited  
A mining-finance house
- A. Sweatman, Q.C., Winnipeg  
Senior Partner, Thompson, Dorfman & Sweatman  
Barristers and solicitors
- J.D. Taylor, Q.C., Johannesburg  
Manager, Anglo American Corporation of  
South Africa Limited
- G.H. Waddell, Johannesburg  
Executive Director, Anglo American Corporation of  
South Africa Limited

\*Member of the Executive Committee

### Officers

- H.R. Fraser  
Chairman
- W.A. Morrice  
President
- J.L. Carpenter  
Executive Vice-President
- J.S. Warick  
Senior Vice-President — Operations
- H. ReKunyk  
Senior Vice-President — Petroleum
- N.G. Ashby  
Vice-President — Industrial Relations
- K.S. Dalton  
Vice-President — Finance
- J. Debray  
Vice-President — Petroleum
- A.M. Doull  
Vice-President
- Dr. J.B. Howkins  
Vice-President — Exploration
- L.W. Ogryzlo  
Vice-President — Development
- J.R.G. Sadler  
Vice-President — Mining
- Dr. C.L. Sarthou  
Vice-President — Market Development
- C.K. Taylor, Q.C.  
Vice-President, Secretary and General Counsel
- G.A.C. MacRae  
Treasurer
- E.P. Haggarty  
Comptroller
- S.A. Hayward  
Assistant Secretary and Assistant Treasurer
- S.R. Horne  
Investment Manager
- Miss S. Kozel  
Assistant Secretary
- P.H. Page  
Assistant Treasurer

# Hudson Bay Mining and Smelting Co., Limited

## annual report 1975

### Report of the Directors

Your Company's earnings for 1975 amounted to \$14,771,000, a result which is clearly disappointing but which reflects the general plight of the mining industry in a period of escalating costs and falling demand and prices.

If anything, our results do not wholly reflect the seriousness of the situation because, in total, our base-metal mining and smelting operations and investments incurred a pre-tax loss of \$249,000, compared with pre-tax profits of approximately \$42,000,000 for 1974 and \$45,700,000 for 1973.

Your Company's operations outside of Canada contributed \$9,047,000 or 61% of net profits for 1975. The relatively poor return from Canadian operations reflects current Canadian mining taxation policy. In 1975 your Company's base-metal mining operations in Manitoba and potash mining and sodium sulphate operations in Saskatchewan earned \$18,338,000, of which taxes and levies to all levels of government amounted to \$14,198,000.

Governments which only a year or two ago heavily increased taxes on Canadian mining under the banner of participating in "windfall profits" have apparently turned a blind eye to the industry's present predicament.

The Company's endeavors to expand and diversify its activities have made a significant contribution to our profitability. We believe we have now reached a level where consolidation is necessary. This may involve some acquisitions and even some disposals of assets with a view to rounding out or upgrading our holdings; but mostly it will involve structuring our investments to achieve greatest efficiency and adapting Head Office management structure to recognize that we have moved from being simply a mining company to becoming a complex international organization requiring more sophisticated control of investments.

#### Governments and industry

**Saskatchewan.** In January, 1976, the Saskatchewan Legislature enacted The Potash Development Act. The Legislature also created a corporation called The Potash Corporation of Saskatchewan with power to carry on the business of potash mining and to purchase

or expropriate potash mining assets pursuant to the Potash Development Act.

The Saskatchewan Government has indicated that its initial goal is provincial ownership of at least 50% of the potash-producing capacity in Saskatchewan and that it expects its initial acquisition to be completed within 18 months.

The Lieutenant-Governor-in-Council, which is in effect the Saskatchewan Cabinet, may authorize the Potash Corporation to acquire assets by purchase or the Cabinet may expropriate assets on behalf of the Corporation, in which event the potash assets so expropriated are automatically vested in the Potash Corporation absolutely. The Potash Corporation is directed to negotiate with the owner (mining company) whose assets have been thus summarily taken with a view to reaching agreement on the compensation payable and if no agreement is reached there is provision for arbitration. At the option of the Potash Corporation, compensation may be paid to an owner partly in cash, which must be at least 30% of the total compensation, and partly in debt of the Potash Corporation guaranteed by the Province of Saskatchewan.

The Saskatchewan Government has informally advised your Company that it may wish to acquire its potash mining assets. At this time, your Company is unable to predict the effects of the legislation on the Company's future operations. It is our belief, however, that during the last decade the management of your Company has shown courage in risking large sums of money and applying resource and imagination in overcoming technical problems to produce what we consider to be as efficient an operation as any in the world. We deplore the actions of a government which, having supported this activity by a guarantee against increases in taxes for 10 years, then undermines the profitability of the operation by crippling tax increases and finally grants to itself the right to take over the most attractive operations by forced sale.

**British Columbia.** Statements by the government which was elected in December, 1975, have given rise to expectations that taxation legislation will be amended late in 1976 to give the mining industry more favorable terms. This prompted the Company to reconsider the

Stikine property in northern British Columbia and to request an extension to April 30, 1978, on the agreements with Stikine Copper Limited, Kenneco (Stikine) Mining Limited and Cominco Ltd. to permit additional drilling on the property. This extension was approved and it is intended to resume work with two diamond drills during the summer of 1976.

The Company has a 31.7% interest in Stikine Copper Limited and this may be increased to 35.6% by further expenditures for diamond drilling and feasibility studies. In the event the property is developed the interest may be increased to 45%.

**Federal.** The Company has established at Head Office a Committee on Compensation and a Committee on Prices and Profits to assure compliance with the Anti-Inflation Act and guidelines.

It is clearly in the interests of all Canadians that inflation be brought under control and it is hoped the measures introduced will have some real effect. It is becoming increasingly clear that restraints on the private sector of the economy without restraints being imposed by governments on themselves will not be adequate for the task. Fiscal responsibility at all levels is essential if inflation is to be checked.

Any system of controls must be designed to recognize the conditions applying to the broadest spectrum of industry. It must, therefore, bear particularly hard on those sectors which do not follow the general industrial pattern such as the mining industry whose profitability is highly cyclical and whose prices are not related to costs except in a very long-term trend.

Furthermore, any mandatory system of controls transfers the decision-making process from those best equipped by knowledge and incentive to deal with the unique individual problems of their business to a central body which of necessity must use a broad-brush technique. The diversion of management skills from increasing efficiency and profitability to tailoring their business to the regulations is costly and jeopardizes long-term prospects of recovery and growth. It is to be hoped that Government recognizes the rapid application of the law of diminishing returns in this situa-

tion and will not be inhibited about removing the structure of controls as soon as possible.

#### **Acquisitions and projects**

During the second quarter of 1975, the Company in two transactions acquired an equity interest of approximately 18% (589,320 common shares) in Inspiration Consolidated Copper Company, of Morristown, New Jersey. On May 29 the Company purchased 79,320 common shares on the New York Stock Exchange. The price paid was approximately U.S. \$32 per share, in cash. On June 26 stockholders of Inspiration ratified a previously announced agreement to issue to the Company 510,000 common shares for a cash price of U.S. \$37 per share.

Inspiration's principal operations are in the State of Arizona where it operates open-pit copper mines, a smelter, refinery and a copper rod fabricating plant. Inspiration also smelts copper-bearing materials for other producers on a custom basis.

At midyear the Company increased its equity interest in Terra Chemicals International, Inc., of Sioux City, Iowa, to approximately 51% from about 30%. Details of the transaction were fully reported in the Company's annual report for 1974.

In August the Company increased its interest in Canadian Merrill Ltd., a Calgary-based oil and gas company, from 23% to approximately 29%. The shares purchased were shares on which the Company had the right of first refusal. Acquisition of the remaining shares subject to the right of first refusal and full conversion of a \$4-million convertible debenture would increase the Company's interest to more than 50%.

Your Company's interest in the La Verde copper deposit in Mexico, through its 33.9% holding in Lytton Minerals Limited, of Vancouver, was reported in detail in the annual report for 1974. In preparing for the development of the property, it became obvious that the project would be adversely affected by the unprecedented inflationary conditions existing throughout the industrial world. In view of cost increases and against the background of a continuing depressed copper market and a growing burden of copper inven-

tories throughout the world, the directors of Compania Cuprifera La Verde, S.A. (La Verde), in which Lytton holds a 48% interest, decided to re-examine the entire project.

Detailed studies were undertaken by the La Verde staff in co-operation with the engineering consultants, Wright Engineers Limited, of Vancouver, and Ingenieria Panamericana S.A., of Mexico. Your Company and Amcan also participated in the co-ordination of the feasibility study as technical supervisors to the project. The feasibility submission was presented to the directors of La Verde in January, 1976.

In spite of pruning capital costs as far as possible, these are now estimated at \$121 million, compared with \$101 million as previously reported. Operating costs have also been subject to inflation with adverse effects on the project's economic return. Accordingly, the directors and shareholders of La Verde are again reassessing the project and a decision is expected in the near future.

#### **Financial**

In June the Company entered the short-term commercial paper market. The Company's notes were favorably received and \$25 million of short-term debt was raised. The amount of short-term commercial paper outstanding has since been reduced to \$15 million.

In December U.S. \$50 million of long-term debt was raised in the United States through the issuance of the Company's 10½% Sinking Fund Debentures due 1995. The proceeds from this issue were used to reduce short-term debt and to add to the general funds of the Company. Additional information with respect to the Company's long-term debt appears in the notes to the financial statements.

#### **Executive appointments**

W.A. Morrice, who retired as President on December 31, 1973, but remained a Director, was appointed President, effective January 1, 1976. He replaced H.A. McKenzie who resigned at year-end from the Company and from the Board for personal reasons. Mr. McKenzie joined the Company in 1948, was elected a Director on April 27, 1973, and became President on

January 1, 1974. He made many significant contributions to the Company's growth.

Mr. Morrice joined the Company in June, 1940, was elected a Director in April, 1971, and President in September, 1971. The Board is grateful that Mr. Morrice agreed to return from his retirement to give the Company the benefit of his valued experience and judgment.

John L. Carpenter, Senior Vice-President—Marketing since January 1, 1974, was appointed Executive Vice-President, effective January 1, 1976. He succeeded J. David Taylor, Q.C., who accepted a senior position in Johannesburg, South Africa, with Anglo American Corporation of South Africa Limited. Mr. Taylor remains a Director of the Company and of Anglo American Corporation of Canada Limited (Amcan) of which he was President until his new appointment.

H. ReKunyk was appointed Senior Vice-President—Petroleum and S. R. Horne Investment Manager.

Steven W. Harapiak was appointed General Manager, Flin Flon operations, on March 1, 1976. He succeeded James E. Goodman who retired at the end of February, completing 31 years of service.

#### Directors

Two new Directors were appointed at a meeting of the Board on March 17, 1976: John L. Carpenter and H. Purdy Crawford, Q.C. Their appointments fill the vacancies created by the resignations of H.A. McKenzie and C.S. Lee, Chairman of Western Decalta Petroleum Limited. Mr. Lee had been a Director since December 14, 1973.

Mr. Carpenter is Executive Vice-President of the Company; Mr. Crawford is a Senior Partner of Osler, Hoskin & Harcourt, barristers and solicitors in Toronto.

W.A. Green, who was actively associated with the Company from its early days in 1925 until he retired



*One of Petromer Trend's exploration camps in Indonesia*

as a Director in 1973, died on March 14, 1975. He supervised the construction of the pilot plant at Flin Flon in 1927 and subsequently rose through the management and executive ranks to become President in 1962. Mr. Green retired as President in April, 1964. Appointed a Director in 1956, he resigned for health reasons in December, 1973, but accepted an honorary directorship.

In recognition of Mr. Green's unique contribution to the Company for half a century, the Company established a \$1,000 university scholarship open to any candidate in the Flin Flon-Snow Lake area and named it the W.A. Green Scholarship.

#### **Outlook**

The outlook for your Company in 1976 is largely dominated by the copper and zinc supply-and-demand situation. This will depend on the rate of economic recovery throughout the world, particularly in the United States. However, it must be noted that the overhang of inventories on the market and the amount of unused capacity is probably greater than ever before and, barring some international upheaval, it is difficult to see a substantial turnaround before the end of the year.

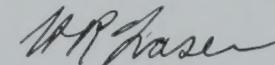
A softening in demand for potash during the last half of 1975, particularly in export markets, resulted in excessive inventories and some restraints on production. Although a vigorous spring selling season and improved economic conditions in the United States are expected to correct this situation, it is anticipated that taxes will continue to depress the earnings of the Company's Sylvite division. Terra Chemicals also should benefit from improved market conditions for fertilizers this spring, particularly those based on nitrogen, and expectations are that Terra will continue to make a significant contribution to the Company's net earnings.

In 1975 the provincial governments, recognizing that their tax and royalty legislation implemented in 1974 resulted in sharply reduced oil exploration activities, offered a variety of exploration and development incentives that partially restored the confidence of the industry. On July 1 the wellhead price of crude oil was allowed to rise to \$8 per barrel – which is still well

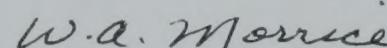
below international crude oil prices – from an average of \$6.50. Regrettably, the Federal government continued to disallow deduction of royalty fees in computing federal income taxes. The industry responded favorably to the provincial incentives. However, the Federal government must encourage more exploration in the frontier areas of high potential, otherwise Canadian reserves will continue to decline. The Company will continue an active exploration program in Irian Jaya, Indonesia, and in other prospective areas of the world.

In spite of all the problems of our times, we believe your Company is doing all that it reasonably can to preserve the profitability of your investment and to take advantage of the opportunities that will come with a change in economic conditions. We believe that your Company is well poised to cope with the challenges and to respond positively to the changes which lie in the future.

On behalf of the Board,



Chairman



President

March 17, 1976



# metals

**Prices and markets.** The downward trend of the Canadian price for copper that started in mid-1974 continued into 1975. At the beginning of the year the price was 73¢ per lb. but by the end of January it had been reduced in two stages to 63.375¢; there were no further price changes during the remainder of the year. On the London Metal Exchange, which determines prices for overseas sales, the price at year-end was 54.17¢ (Cdn.), compared with 55.83¢ at the beginning of the year.

Overseas sales accounted for 74% (65% in 1974) of the Company's copper sales; Canadian sales accounted for 26% (35%). The Company did not sell copper in the U.S. in 1975 or 1974.

**The base price for zinc in Canada** remained unchanged at 37¢ per lb. throughout the year. In the U.S. the price was 2¢ higher than the Canadian price. Overseas, the European producer price rose from 34.46¢ (Cdn.) to 37.33¢ in October. In December, prices were quoted in U.S. funds rather than in sterling and the price was changed to \$795 per ton (36.59¢ per lb. Cdn.).

Zinc sold in Canada accounted for 57% of total zinc sales (54% in 1974); U.S. sales—27% (35%); overseas—16% (11%).

**Prices for gold and silver decreased** during the year. Gold was \$140.20 (U.S.) per oz. at year-end, down from \$175 in January. Silver dropped from \$4.27 (U.S.) per oz. in January to \$4.165 at year-end.

**Exploration.** Hudson Bay Exploration and Development Company Limited explored for its own account

*A blasting crew in one of Inspiration Consolidated Copper Company's open-pit mines in Arizona*



in Manitoba and Saskatchewan and jointly with Amcan in the southwestern U.S., the Yukon, Northwest Territories, Ontario and Quebec. A total of 80,328 feet was drilled to test 207 geophysical anomalies and to explore mineralized zones.

**In the Yukon,** exploration carried out jointly with Amcan discovered zinc-lead mineralization. Following geochemical and geophysical surveys, this occurrence of sphalerite and galena in carbonate rocks was tested by 12 diamond-drill holes. Further drilling will be done in 1976 to investigate its economic potential.

**Reserves.** Proven reserves of copper-zinc ore in the Company's mines in the Flin Flon-Snow Lake area at year-end totalled 17,453,800 tons, assaying gold, 0.033 ozs. per ton; silver, 0.52 ozs. per ton; copper, 2.77%; zinc, 2.8%. Ore reserves at year-end 1974 totalled 17,973,800 tons.

A total of 1,470,105 tons was mined during 1975; the tonnage added to reserves was 950,105, resulting in a net loss of 520,000 tons.

The new calculation of ore reserves included average waste dilution of 17.8% and average estimated recovery of 89.5% of diluted tonnage.

**The proposed 1976 budget** controlled by Hudson Bay Exploration is estimated at \$4.16 million. This amount includes approximately \$1.75 million to be contributed by Amcan and Tombill Mines Limited under a joint-venture agreement.

**The Government of Manitoba** participated with Hudson Bay Exploration on a 50% basis in exploration programs on 10 properties in Manitoba under terms of the Mineral Disposition Regulation, 1974. The amount claimed from the Government as its share of expenditure on these programs is \$370,000. At year-end the Government had paid only \$250,000 and had disallowed \$120,000. Part of the latter amount may be recovered during 1976. Nothing of economic importance was found and Hudson Bay Exploration does not plan to continue these programs. The Company has again reduced its exploration budget in Manitoba and Saskatchewan—from \$1.5 million in 1975 to \$700,000 in 1976.

**Minsearch Surveys Limited**, in which the Company holds a 25% interest, concentrated on developing the

Barringer Airtrace system to an operational state. Airtrace, an airborne survey system that detects minerals and hydrocarbons in underlying bedrock by collecting and analyzing atmospheric particulates, received intensive study and major improvements were made in equipment design and data treatment. Better understanding was gained of the biogeochemical process whereby amounts of elements in nutrient solutions which are in excess of those required for growth of vegetation are emitted into the atmosphere as particulates. As a result of this development work, Minsearch decided to use chartered helicopters instead of its DC-3 aircraft for carrying the equipment. Minsearch is now offering the Airtrace system to industry for funded tests or production surveys in any part of the world.

**The EM-30** airborne electromagnetic survey system (formerly called Zero Gradient) flew 4,868 line-miles of survey in Ontario and Quebec early in 1975, operating with the prototype single-frequency equipment mounted in a Beechcraft. The system was then upgraded to dual-frequency operation to enable better penetration of overburden and 7,000 line-miles of survey were flown in the District of Keewatin, Northwest Territories. In accordance with terms of an agreement with Vaino Ronka, the inventor, arrangements are being made with a contracting firm to market EM-30 surveys.

Minsearch's DC-3 aircraft has been purchased by the Company and will be fitted with a second dual-frequency EM-30 system. The larger aircraft provides greater capacity for magnetic and radiometric detection instruments, larger separation distance for the electromagnetic coils, and longer range, which should improve the efficiency of the EM-30 system.

**Flin Flon operations.** Production of metals was as follows: refined copper, 129,536,980 lbs.; slab zinc, 130,234,268 lbs.; cadmium, 139,698 lbs.; selenium, 133,580 lbs.; gold, 63,066 ozs.; silver, 1,230,420 ozs.; 229 tons of lead concentrate containing 78 ozs. of gold, 6,780 ozs. of silver, and 319,950 lbs. of lead.

**Producing mines.** Eight of the nine mines in the Flin Flon-Snow Lake area operated continuously but Osborne Lake Mine, Chisel Lake Mine and Stall Lake Mine produced less than their rated tonnages due to considerable development work.

Ore production totalled 1,470,105 tons, 100,657 tons less than the tonnage mined in 1974 because of the continuing shortage of trained underground labor.

Details of this production, with average assays, are as follows:

mine	tons	average assays				
		Au oz./ton	Ag oz./ton	Cu %	Zn %	Pb %
Flin Flon	573,775	0.04	0.7	1.8	2.0	—
Anderson Lake	110,072	0.03	0.2	3.2	0.2	—
Chisel Lake	119,639	0.06	1.1	0.7	10.8	0.4
Osborne Lake	191,490	0.02	0.2	2.8	1.8	—
Dickstone	118,197	0.02	0.4	2.6	2.5	—
Schist Lake	45,303	0.03	0.8	4.1	4.4	—
Stall Lake	163,366	0.03	0.3	4.2	0.7	—
White Lake	104,300	0.02	0.9	2.5	4.9	—
Ghost Lake	43,963	0.05	1.0	1.4	10.6	0.6

Remnants and pillars were the main sources of ore in the Flin Flon Mine and 132,145 tons were mined from areas not previously included in the ore reserves.

At midyear, production at Schist Lake Mine was reduced due to poor ground conditions which forced the abandonment of the lower levels. Ore reserves will be exhausted early in 1976.

Production from White Lake Mine equalled the previous year's tonnage but much of the ore came from pillars. Developed ore reserves are sufficient for approximately six months of operation.

Dickstone Mine, which is operated on a profit-sharing basis by the Company for Dickstone Copper Mines Limited, was shut down in August because of current economic conditions. Low metal prices and escalating costs, including higher provincial mining levies, made it uneconomical to spend approximately \$2.5 million to develop the ore below the 1,150-ft. level. Estimated reserves below the existing shaft are 340,000 tons grading 2.36% copper and 4% zinc plus gold and silver values.

The reduced production at Ghost Lake Mine was the result of mining remnants.

To improve operations at Chisel Lake Mine, the main production shaft was deepened 267 feet. A crusher and improved loading facilities will be installed.

Production was reduced during the last four months of the year while the development work was underway.

Stall Lake Mine operated at less-than-planned tonnage but output is expected to improve. Studies are underway to determine the most feasible way to increase production of good-grade ore from the deeper levels.

Osborne Lake Mine produced 191,490 tons, 59,781 tons more than in the previous year. In addition, more than 9,000 feet of stope development was completed.

Production from Anderson Lake Mine was much lower than planned, due to the necessity of changing from an open-stope mining method to a cut-and-fill method and inexperienced labor.

**Mines under development.** At Centennial Mine, the main shaft was sunk 1,411 feet. Eight level-stations were completed, the loading pocket and sump were excavated and all equipment was installed. At year-end, lateral development had started on most levels. Exploration drilling increased the ore reserves by 142,700 tons, to 1,460,000 tons.

At Westarm Mine, the hoist and all surface plant equipment were installed. Shaft-sinking started on June 1 and totalled 1,457 feet at year-end. Seven level-stations were excavated.

**Metallurgical operations.** The concentrator treated 1,470,157 tons of ore, representing 5,857 tons per operating day.

	1975	1974
tons of ore treated	1,470,157	1,574,948
average tons per calendar day	4,028	4,315
Au-oz./ton	.03	.04
Ag-oz./ton	.6	.6
Cu-%	2.4	2.3
Zn-%	3.0	3.2
Pb-%	.2	.1

The following concentrates were produced from ore treated:

	assays	Au	Ag	Cu	Zn	Pb
	tons	oz./ton	oz./ton	%	%	%
copper	198,308	.14	2.7	16.48	3.6	.3
zinc	54,636	.09	1.6	.80	48.6	1.0
lead	229	.34	29.7	.48	1.9	69.9

A total of 1,209,219 tons of flotation tailings was produced, of which 653,044 tons were treated in the cyanide plant for partial recovery of gold and silver. Low values of gold and silver, however, made the operation uneconomical and the plant was shut down on December 1.

At year-end the tonnage and approximate assays of the tailings stockpile were as follows:

tons	assays					
	Au oz./ton	Ag oz./ton	Cu %	Zn %	S %	Fe %
55,685,575	.02	.3	.2	.7	23.1	25.8

**Zinc refinery.** Production was cut back to 70% of capacity for part of the year due to reduced sales. Despite the cutback and because of continued low sales, the stockpile of zinc at the year-end totalled 15,932 tons.

Cadmium cathode sheets were stripped throughout the year but were not cast into market shapes for five months, resulting in an inventory of 47,720 lbs. of cathode cadmium at year-end.

The following materials were treated:

	assays				
	tons	Au oz./ton	Ag oz./ton	Cu %	Zn %
HBM&S concentrates	52,964	.090	1.56	.80	48.6
purchased concentrates	70,260	—	.58	.98	50.4
oxide	34,686	.009	.72	.69	63.2

Production of sulphide residue totalled 48,678 tons, which were sent to the smelter. Oxide residue production amounted to 8,478 tons, which were stockpiled.

**Copper smelter.** Tonnages and assays of materials treated in the smelter were as follows:

	assays				
	tons	Au oz./ton	Ag oz./ton	Cu %	Zn %
HBM&S concentrates	199,309	0.143	2.70	16.469	3.593
residues, etc.	55,321	0.088	2.371	1.256	25.968
purchased concentrates	130,824	0.245	4.465	26.191	3.752

The tonnage and metal content of anode copper produced for the Company's account and for shipment to the refinery were as follows:

	tons	Au/oz.	Ag/oz.	Cu/lbs.	Se/lbs.
Hudson Bay feed purchased	31,786	34,009	625,767	63,285,873	133,577
concentrates	33,956	31,395	605,319	67,605,657	3
total	65,742	65,404	1,231,086	130,890,930	133,580

Stack dust from the smelter baghouse totalled 7,959 tons, assaying 31.091% Zn, 3.066% Cu, 1.345% Cd, and 13.216% Pb.

Slag treated in the fuming furnaces totalled 349,131 tons, yielding 26,290 tons of oxide fume containing 38,213,619 lbs. of zinc.

The smelter was shut down for seven days in late May and early June to rebrick the reverberatory furnace and install the damper for the new south boiler.

**Environmental control.** The environmental control department increased its scope and became more involved with in-plant problems. A great deal of work was done monitoring industrial hygiene parameters and recommendations were made for improvements in several areas.

Overall quality of plant effluent during the year showed some improvement. Shutting down the cyanide section of the mill, increasing the holding time in the tailings area, and improving seepage control have all indicated positive results. The practice of pH control in the tailings area, starting in 1976, should produce significant additional improvements. Extensive pilot and plant-scale testing of waste-water treatment techniques, undertaken during the year, will continue in 1976.

The public was involved in departmental activities by participating in two sponsored contests, one fishing and one gardening, and by exposure to a number of presentations. A high level of co-operation was maintained with federal and provincial environmental control agencies and a joint project was contracted with the Federal Department of Energy, Mines and Resources on revegetation of tailings.

**Major projects.** The second new reverberatory boiler began operating in October; the cooling tower was commissioned in June. The 15 megawatt turbine and standby diesel generator were installed and are available for use. All requirements of the new flue system have been completed and a service hoist was installed in the 825-foot stack.

**Industrial relations.** At year-end there were 2,461 employees on the payroll, compared with 2,489 at the end of 1974. There was a continuing lack of trained labor, especially underground personnel. Recruiting programs in the Prairie Provinces were expanded to include the Maritimes and Ontario.

A total of 1,435 persons (including students) was hired during the year; during the same period 1,459 employees (excluding students) left the Company. The comparable figures for 1974 are 1,644 hirings and 1,674 terminations.

During the year the Company continued to develop programs to assist employees to improve their abilities. The career development and supervisory development programs, used to assess the potential of an employee for supervisory responsibility and to provide training for supervisors in management responsibility, were introduced.

In addition, programs of employee development were initiated in job theory training in six work areas where technical knowledge is not provided by the apprenticeship program.

Continued emphasis was placed on the apprenticeship program, particularly with the introduction of the miner apprenticeship in the Province of Manitoba. At year-end there were 104 registered apprentices in 10 trades.

The industrial physician's department continued to provide all pre-employment examinations and special employee medicals, and introduced new programs for monitoring the health of employees.

In September, the unions jointly asked the Company to consider granting an interim increase in wages to offset the effects of increased inflation. The Company

declined, basing its position on the adverse effect of current market conditions and excessive levels of taxation imposed by governments on earnings.

On October 1, the balance of the third-year scheduled wage increase provided for in the current Collective Bargaining Agreement, amounting to 3.2% of base rate, became effective. The Company had advanced a portion of the third-year scheduled wage increase, 2.5% of base rate, on November 18, 1974. The Agreement expires on September 30, 1976.

At year-end, 1,406 employees, past and present, had completed at least 25 years of service, 62 having qualified in 1975. The number of employees with 25 years or more of service on the payroll at year-end was 610.

**Whitehorse Copper Mines Ltd.** Production from the joint venture, in which the Company has a 16 $\frac{2}{3}$ % interest, was at a rate of approximately 2,040 tons per day, grading 1.51% copper, and totalled 739,000 tons for the year.

Concentrate production totalled 27,700 tons at an average grade of 36% copper. Most of the concentrate was shipped to the Company's smelter at Flin Flon; a small amount was shipped to Noranda, Que.

Due to the installation of the underground crusher, ore production was above budgeted figures, but copper production and grade were below budget because lower-grade pillars were being mined. Production from the higher-grade No. 7 Pillar will be started early in 1976.

Development work continued in the preparation for mining below the 1,750-foot level. Layouts will include provision for an underground conveyor which should improve production when the system is commissioned in mid-1976.

Underground drilling during the year did not discover sufficient ore to maintain the 1974 ore reserves. Underground exploration will continue in 1976.

**Inspiration Consolidated Copper Company** reported a net loss for 1975 of \$3,910,000, compared with 1974

net income of \$9,469,000. The loss resulted mainly from the poor copper market, sharply lower copper prices, and increased costs of production.

As a result of the loss for 1975, a refund of \$1,110,000 of U.S. federal income taxes paid in prior years will be received and investment tax credits of \$1,308,000 are available to reduce income tax expense in future years.

In 1975, proceeds from deliveries of 87,425,000 pounds of copper at an average price of 63.34¢ per lb. totalled \$55,374,000. This compares with proceeds of \$83,123,000 from copper deliveries of 111,568,000 lbs. at an average price of 74.5¢ in 1974.



## Review of operations



# fertilizers chemicals

**Sylvite of Canada**, the Company's potash division, produced 901,444 tons of potash, shipped 850,239 tons and sold 970,686 tons during the year. The comparable figures for 1974 are 1,093,449 tons produced, 1,105,005 tons shipped and 1,076,355 tons sold.

The lower production figure—only 75% (91% in 1974) of the refinery's rated capacity of 1.2 million tons annually—was the result of a 13-week shutdown: a scheduled three-week period for maintenance and vacations, plus the additional loss of production while repairs were being made following a fire that broke out on July 14, the first day of the maintenance period. Full production was resumed on October 11.

**The fire**, caused by a spark from a cutting torch that ignited some flammable material, occurred in the headframe of the production shaft and was extinguished after about three hours by Sylvite's fire department, assisted by the Rocanville fire brigade.

The inside sheeting of the headframe, the insulation and the electric cables were burned out. The hoisting cables parted under the intense heat and both 24-ton-capacity hoisting skips fell to the bottom of the shaft. The replacement costs, before insurance recoveries, are estimated at \$2 million.

*Top: Tank cars at Terra Chemicals' fertilizer manufacturing complex near Sioux City, Iowa*

*Bottom: Francana Minerals Ltd.'s sodium sulphate plant at Grant, Saskatchewan*

There were no fatalities or injuries. All personnel underground and in the refinery were evacuated from their work areas when the alarm was sounded.

**Markets and prices.** Demand for potash was strong during the first quarter and although it was somewhat lower during the second quarter, the base price, excluding a surcharge to offset the Saskatchewan government's reserve tax, held at \$37.21 per ton from January until June when it dropped to \$34.16. Farmers in Canada and the U.S. were applying less fertilizer and dealers were working down their high inventories. Weak market conditions prevailed for the remainder of the year. Export sales, however, were strong from January until September when they, too, began to slacken as customers trimmed their inventories.

**Canadian sales** accounted for 10.5% (12% in 1974) of total sales; U.S. markets for 63.5% (62%) and overseas 26% (26%). Sylvite's own staff handled Canadian sales; Terra Chemicals continued as Sylvite's major sales agency in the U.S.; Canpotex, the export association formed by producers, was responsible for all phases of marketing overseas.

**A four-rotor mining machine** and auxiliary equipment, which were ordered late in 1974 for delivery early in 1977, will now be delivered sooner and should be operating by the end of 1976. In addition to easing the workloads on the two four-rotor machines now being used for both development and production mining, the third machine will not only ensure production continuity but will also make it possible to improve ore grade by being more selective as to the areas to be mined.

**Ore reserves at year-end** totalled 340 million tons, compared with 350 million tons a year earlier. Reserves can be increased easily by further exploration in the lease area, of which only a small portion contains the present reserves.

**Construction.** Aside from repairing the production shaft and hoisting equipment following the fire, there were no major construction projects during the year. Other major capital expenditures were progress payments for the new mining machine.

**Employees.** There were no layoffs during the 13-week shutdown although several employees took extended leave of absence at their request. Production personnel assisted Sylvite's small construction crew during the repair period.

**Terra Chemicals'** results for the year ended December 31, 1975, show net earnings of \$18,565,000, down 13% from \$21,405,000 in 1974 before extraordinary credit (utilization of net operating loss carryovers) of \$3,570,000. Revenues increased by 7.6% to \$110,653,000 from \$102,806,000 in 1974.

Terra manufactures nitrogen-based fertilizers and nitrogen feed ingredients and purchases other chemical fertilizers for blending with the company's nitrogen products.

Approximately 70% of Terra's output is marketed direct to farmers through 57 retail farm-service centres in its primary seven-state Midwest marketing area. The company also sells nitrogen, phosphates and potash products to wholesale customers throughout the U.S.

**Francana Minerals Ltd.** experienced its most profitable year in 1975 despite major problems at both the Grant and Hardene plants that affected production and sales.

Demand for detergent-grade sodium sulphate (produced at the Grant plant) remained strong throughout the year but the market for salt cake-grade sodium sulphate (produced at the Hardene plant) was weaker. Most of this material is used by kraft pulp mills and prolonged strikes at Canadian kraft mills plus high inventories reduced demand for product in Canada.

**Prices remained strong** for both grades of sodium sulphate throughout 1975 and increases were general during the last quarter. The supply of detergent grade is still tight. With the expected improvement in the North American economy in 1976, pulp mills will be running at higher capacity and salt cake supplies likely will be barely adequate to meet demand.

**Francana's sales in 1976** will be limited by the amount of raw material available. Contracts have been signed for the projected output of both plants: 76,000 tons at Grant and 36,000 tons at Hardene.



## Review of operations



## oil/gas

**Francana Oil & Gas Ltd.**'s consolidated gross revenue in 1975 was \$55,416,000 (\$18,496,000 in 1974). Funds generated from operations totalled \$30,994,000 (\$8,651,000). Total exploration and development expenditures, including land acquisition and retention, geological and geophysical work, drilling and production equipment, amounted to \$24,070,000 (\$13,015,000). Net earnings were \$10,125,000 (\$5,218,000).

**Sales of crude oil** from North American operations totalled 738,000 barrels (923,000); natural gas sales were 2,800 million cubic feet (3,190 million cubic feet).

**Exploration and development programs** involved direct and indirect participation in 34 wells, resulting in four oil wells, 17 gas wells, and 13 dry holes.

**Reserves.** Proven and probable additional reserves at year-end were: crude oil and natural gas liquids 14,065,000 barrels; natural gas – 92.4 billion cubic feet.

**Trend Exploration Limited.** North American operations produced 234,000 barrels of crude oil (429,000 barrels) and 350 million cubic feet of natural gas (489 million cubic feet). Exploration and development programs included a total of 32 wells, most of them in New Mexico and North Dakota. Results: nine oil wells, one gas well, one service well, and 21 dry holes.

**Reserves** in North America totalled 5,346,000 barrels of crude oil and natural gas liquids and 12.9 billion cubic feet of natural gas. Under the terms of the Production-Sharing Contract with Pertamina, the Indonesian state-

*Top: A Petromer Trend seismic crew in Indonesia*

*Bottom: A Merrill oil drilling rig in Western Canada*

owned oil company, reserves in Indonesia are confidential.

**Indonesia.** Petromer Trend, a division of Trend Exploration, produced 22,975,000 barrels of crude oil (an average of 63,000 barrels a day), compared with 11,168,000 barrels (30,600 barrels a day) in 1974. Trend's share of sales totalled 3,074,000 barrels (1,600,000 barrels in 1974). Although production capacity fell short of expectations due to logistical problems and increasing water production from some of the wells, output was more than 70,000 barrels a day at year-end.

Trend drilled nine exploratory wells and 19 development wells in 1975. The 1976 program will involve four rigs on continuous exploratory and development drilling; the northern portion of the concession will be evaluated.

**Construction projects included:** a gathering and pipeline system; a central processing facility at the Kasim marine terminal; permanent dock and other harbor facilities; dredging of the Sele Channel to permit 100,000-ton tankers to dock at the terminal; and a crude-oil topping plant that will produce diesel fuel, gasoline, and aviation fuel for use in the Irian Jaya concession.

**International prospects include:** an 18.5 million-acre prospecting permit in Paraguay; a 369,000-acre concession area in the Cameroon, which is expected to be issued during early 1976; continuing interests in the U.K. sector of the North Sea; evaluation of a potash occurrence in Thailand.

Concessions in Pakistan and offshore Italy were abandoned when additional seismic and other surveys failed to produce the evidence needed to justify substantially increased costs of drilling.

**Western Decalta Petroleum Limited's** consolidated gross income totalled \$17.2 million during 1975 (\$14.4 million in 1974). Net income was \$4.9 million (\$3.5 million). Cash flow increased to \$11.7 million (\$9.8 million). Improved product prices were partially offset by lower sales volumes and higher operating costs.

Gross expenditures for acquiring, finding and developing reserves of crude oil and natural gas in 1975 totalled \$10.9 million (\$11.5 million).

Gross production of crude oil and natural gas liquids totalled 2,642,000 barrels in 1975 (3,065,000 barrels), the decline resulting primarily from the Federal government's volume restriction on exports to the U.S. Gross natural gas sales were 8.2 billion cubic feet (7.4 billion cubic feet).

**Reserves.** Proven and probable additional reserves of crude oil, including natural gas liquids, and natural gas at year-end were 36,152,000 barrels and 213 billion cubic feet, respectively.

**North America.** Decalta participated in drilling 59 wells, of which 43 were in Alberta, resulting in 10 oil wells, 12 gas wells and 37 abandonments. The above does not include Decalta's participation in or the results of drilling offshore Texas.

**Decalta International Corporation (DIC)** is a wholly owned subsidiary. Some of its current activities are:

**Offshore Texas.** DIC owns varying interests in 18 tracts. Development drilling is being conducted from two production platforms, a third platform is being set up and two platforms are expected to arrive on location during the first half of 1976.

**Bolivia.** The first of three wells is drilling on a 2.5 million-acre contract area in the foothills belt of southern Bolivia. All three wells will be drilled during 1976.

**Adriatic Sea.** During 1975 DIC and its associates continued to strengthen their permit holdings offshore Italy. DIC holds interests ranging from 2% to 10% in eight tracts totalling 515,000 gross acres. Seismic programs over some of these tracts will be conducted during 1976.

**Brunei.** DIC and associates are conducting a seismic program on a 231,700-acre concession mainly onshore in the Brunei Basin – a major oil-producing basin on the northwest coast of Borneo. Following completion of the seismic program, DIC and associates will have the right to drill a well in order to earn a sizable interest in the concession.

**Canadian Merrill** during its fiscal year ended June 30, 1975, operated primarily through its three wholly owned subsidiaries: Provident Resources Ltd., an oil and gas exploration and development company with producing properties in Canada and the U.S.; Baldwin & Knoll Limited, an oilfield well-servicing company, and L & M Oilfield Equipment Ltd., an oilfield equipment sales and rental company. Subsequent to the fiscal year-end, these subsidiaries were amalgamated into Provident Resources and virtually all the assets of the well-servicing and equipment sales and rental operations were sold by December 31, 1975, for aggregate sales proceeds of approximately \$6.1 million. It is anticipated that additional proceeds of approximately \$1.2 million will be realized for the remaining assets.

**Gross revenue** from all operations for fiscal 1974-1975 totalled \$12 million, compared with \$10.2 million for the previous year. Cash flow decreased to \$2.1 million from \$2.2 million due to higher costs in the well-servicing operations. Income before extraordinary items totalled \$478,000, compared with \$588,000. Net income after extraordinary items increased to \$495,000 from \$388,000 for the previous year.

**Gas production increased** to 7.07 billion cubic feet (19.4 million cubic feet per day) from 5.48 billion cubic feet (15 million cubic feet per day). Oil production declined to 181,000 barrels (497 barrels per day) from 205,000 barrels (561 barrels per day) due to a reduced Alberta allowable.

**Reserves.** During 1975, Merrill adopted the policy of directing all its resources into the exploration and production segments of the oil and gas industry. Accordingly, estimated gross reserves of 79 billion cubic feet of gas and 400,000 barrels of oil were purchased (effective January 1, 1975) in April, 1975, for \$7.5 million from former participants in Provident-sponsored Drilling Fund programs.

Total proven and probable gross reserves at June 30, 1975, totalled 257 billion cubic feet of gas and 1,538,000 barrels of oil.

Merrill's exploration and development drilling program in fiscal 1974-1975 involved 38 wells, resulting in 30 gas wells, one oil well and seven dry holes.



## Review of operations



# manufacturing

**Zochem Limited** experienced unexpected operating problems, largely mechanical, early in the year but they were corrected by the end of the third quarter and production capability rose beyond the present design capacity of 60 tons of zinc oxide per day. However, the plant was operated at only 63% of design capacity because the predicted demand for oxides did not materialize, reflecting the depressed state of the North American economy.

Although overall sales for the year were about 15% less than predicted, somewhat stronger demand in the third quarter coincided with reduced unit costs and better operating results and moved Zochem into a profitable position.

A two-year contract with the International Chemical Workers Union expires on June 28, 1976.

**Hudson Bay Diecastings Limited.** The sharply lower demand for automobiles that began in the third quarter of 1974 and continued throughout the first half of 1975 resulted in reduced sales of zinc-base diecastings.

Sales of automobiles are expected to increase in 1976 but earnings will be adversely affected by increased costs of fuel and power. In addition, the two-year contract with the United Automobile Workers expires on September 30, 1976, and a new agreement likely will result in higher labor costs. Fortunately, operating efficiency was improved and some costs were reduced by the addition of several new pieces of equipment.

*Hudson Bay Diecastings Limited produces a wide range of zinc-base parts for the automotive and appliance industries*

**Hudson Bay Mining and Smelting Co.,  
Limited and subsidiary companies**

**Consolidated statement  
of financial position**

as at December 31, 1975 and 1974

The accompanying notes are an integral part of  
the financial statements.

	<b>1975</b>	<b>1974</b>
	(in thousands)	
<b>Current assets:</b>		
Cash and short-term securities	\$ 16,769	\$ 26,642
Accounts receivable	51,721	24,393
Inventories – metals and metal products (Note 2) – fertilizers and chemicals	39,339 22,865	26,459 1,290
Total current assets	130,694	78,784
Deduct:		
<b>Current liabilities:</b>		
Accounts payable and accrued liabilities	46,269	34,266
Dividend payable	1,988	3,977
Loans from associated company	1,690	6,944
Income and other taxes payable	3,832	11,489
Notes payable	15,091	
Long-term debt due within one year	3,118	2,380
Total current liabilities	71,988	59,056
<b>Working capital (Note 10)</b>	58,706	19,728
Add:		
<b>Marketable securities—at cost</b>		
(Market value 1975—\$1,438,000; 1974—\$1,626,000)	2,541	2,541
<b>Investment in joint venture—at equity value</b>	1,285	1,623
<b>Investment in other companies (Note 3)</b>	68,133	61,370
<b>Property, plant and equipment (Note 4)</b>	254,797	206,475
<b>Other assets:</b>		
Unamortized mine development expenditures	38,386	35,118
Materials and supplies—at cost	10,821	9,188
Sundry assets and deferred charges—at cost	11,113	7,592
	60,320	51,898
<b>Capital employed</b>	445,782	343,635
Deduct:		
<b>Long-term debt (Note 5)</b>	86,425	28,510
<b>Deferred income taxes</b>	35,082	28,833
<b>Minority interest in subsidiaries</b>	106,957	69,827
	228,464	127,170
<b>Shareholders' investment</b>	\$217,318	\$216,465
<b>Investment represented by:</b>		
Capital stock—issued and fully paid—		
9,941,658 no par value common shares (Notes 6 and 11)	\$ 68,442	\$ 68,442
Retained earnings	148,876	148,023
<b>Total shareholders' investment</b>	\$217,318	\$216,465

Approved by the Board of Directors

Director: H. R. Fraser

Director: W. A. Morrice

**Hudson Bay Mining and Smelting Co.,  
Limited and subsidiary companies**

**Consolidated statement of earnings**

For the years ended December 31, 1975 and 1974

The accompanying notes are an integral part of  
the financial statements.

	<b>1975</b>	<b>1974</b>
	(in thousands)	
<b>Revenue:</b>		
Sales of product, less freight and selling expenses (Note 2)	<b>\$259,634</b>	\$217,210
<b>Costs and expenses:</b>		
Cost of sales (Notes 2 and 8)	<b>153,399</b>	119,752
Depreciation and depletion	<b>24,637</b>	9,995
Amortization of mine development expenditures	<b>6,806</b>	6,569
Exploration expenses	<b>3,222</b>	4,214
General administrative expenses	<b>7,769</b>	4,423
Interest (Note 5)	<b>6,723</b>	3,165
	<b>202,556</b>	148,118
<b>Earnings before taxes and other income</b>	<b>57,078</b>	69,092
<b>Other income (Note 9)</b>	<b>4,112</b>	5,529
<b>Earnings before taxes</b>	<b>61,190</b>	74,621
<b>Income taxes, mining taxes and royalties:</b>		
Mining taxes and royalties	<b>9,620</b>	10,644
Income taxes (Note 2)	<b>27,005</b>	23,295
	<b>36,625</b>	33,939
<b>Earnings from operations</b>	<b>24,565</b>	40,682
<b>Other deductions:</b>		
Provision for future write-offs of investments	<b>2,185</b>	540
Minority interest in earnings of subsidiaries	<b>11,894</b>	4,303
	<b>14,079</b>	4,843
<b>Equity in earnings of associated companies</b>	<b>10,486</b>	35,839
<b>Net earnings for the year (Note 2)</b>	<b>4,285</b>	9,129
<b>Earnings per share (Note 2)</b>	<b>\$ 14,771</b>	\$ 44,968
	<b>\$ 1.49</b>	\$ 4.52

**Consolidated statement  
of retained earnings**

For the years ended December 31, 1975 and 1974

<b>Balance at beginning of the year</b>		
As previously reported	<b>\$148,855</b>	\$126,183
Adjustment for change in inventory valuation (Note 2)	<b>(832)</b>	(7,221)
As restated	<b>148,023</b>	118,962
<b>Net earnings for the year</b>	<b>14,771</b>	44,968
	<b>162,794</b>	163,930
<b>Dividends</b>	<b>13,918</b>	15,907
<b>Retained earnings at end of the year</b>	<b>\$148,876</b>	\$148,023

**Hudson Bay Mining and Smelting Co.,  
Limited and subsidiary companies**

**Consolidated statement of changes  
in financial position**

For the years ended December 31, 1975 and 1974

The accompanying notes are an integral part of  
the financial statements.

	<b>1975</b>	<b>1974</b>
	(in thousands)	
<b>Source of funds:</b>		
Operations:		
Earnings from operations	\$ 24,565	\$ 40,682
Depreciation, depletion and amortization of mine development expenditures	31,443	16,564
Deferred income taxes	5,360	10,179
Share of earnings of joint venture	(112)	(1,174)
	61,256	66,251
Dividends from associated companies	799	1,666
Cash distribution from joint venture	450	1,464
	62,505	69,381
Working capital of subsidiary in excess of cost of acquisition (Note 7)	6,027	—
Proceeds from long-term debt	61,033	4,501
Issue of securities by subsidiaries to minority interest (Note 7)	—	56,577
Realization of investments	1,534	1,927
Issue of shares under options	—	6
	131,099	132,392
<b>Application of funds:</b>		
Dividends	13,918	15,907
Investment in subsidiary (Note 7)	—	72,456
Investment in other companies	24,141	14,484
Additions to property, plant and equipment	37,125	37,752
Mine development expenditures	10,074	5,887
Reduction of long-term debt	3,118	3,880
Increase in materials and supplies	1,633	2,795
Increase in sundry assets	341	2,365
Decrease in minority interest	1,771	—
	92,121	155,526
<b>Increase (decrease) in working capital (Note 10)</b>	<b>38,978</b>	<b>(23,134)</b>
<b>Working capital at beginning of the year</b>		
As previously reported	21,010	53,973
Adjustment for change in inventory valuation (Note 2)	(1,282)	(11,111)
As restated	19,728	42,862
<b>Working capital at end of the year</b>	<b>\$ 58,706</b>	<b>\$ 19,728</b>

# Hudson Bay Mining and Smelting Co., Limited and subsidiary companies

## Notes to the consolidated financial statements December 31, 1975 and 1974

### 1. Summary of significant accounting policies

#### Generally accepted accounting principles:

The consolidated financial statements are prepared in conformity with generally accepted accounting principles as established in Canada, which conform in all material respects with those established in the United States, except as explained in Note 2.

#### Principles of consolidation:

The consolidated financial statements include the accounts of Hudson Bay Mining and Smelting Co., Limited and all companies more than 50% owned. In addition, the Company follows the equity method of accounting for its interest in associated companies in which it, together with other associated companies, owns from 20% to 50% of the common shares.

As explained in Note 7, the Company acquired an additional interest in Terra Chemicals International, Inc. as of July 1, 1975, and Trend Exploration Limited as of July 1, 1974, which resulted in these companies becoming subsidiaries in those years and being included on a consolidated basis for the first time. Prior to the above dates, these investments were accounted for by the equity method.

#### Foreign currency translation:

Foreign currencies have been translated into Canadian dollars as follows: revenue, costs, and expenses of foreign subsidiaries at the average rates of exchange for the period; noncurrent assets (including depreciation, depletion and amortization thereof) and noncurrent liabilities at rates in effect at dates of transactions; current assets and liabilities at rates in effect at the end of the year. Gains and losses on currency translations are included in the consolidated statement of earnings.

#### Inventories, materials and supplies:

Inventories of base metals, fertilizers and chemicals and all other saleable products are valued at the lower of cost or estimated net realizable value; base-metal by-products are valued at estimated net realizable value. Materials and supplies are valued at cost. Cost is determined on the first-in, first-out basis, except the inventories of a subsidiary, Terra Chemicals International, Inc., which are valued on the last-in, first-out basis and which represent substantially all of the inventories of fertilizers and chemicals.

#### Property, plant and equipment:

Exploration costs with respect to mines operating or in the development stage are capitalized as mineral properties; all other mineral exploration costs are written off to expense as incurred. Oil and gas properties are accounted for on the full-cost basis whereby all costs relating to the exploration for, and the development of, oil and gas resources are capitalized whether productive or nonproductive.

Expenditures for plant and equipment additions, major replacements and improvements are capitalized in the property accounts; the cost of maintenance and repairs is charged to operating expense as incurred.

#### Depreciation and depletion:

Depreciation of base-metal plant and equipment and depletion of oil and gas properties are charged to operations by the unit-of-production method based on estimated recoverable reserves. Depreciation of other plant and equipment is charged to operations generally on a straight-line basis over their estimated useful lives.

#### Amortization of mine development expenditures:

Mine development expenditures are charged to operations on a unit-of-production method based on estimated recoverable reserves.

#### Deferred income taxes:

Deferred income taxes represent tax reductions for expenditures on mine development, oil and gas and other properties, cost of participation in certain mining companies, and depreciation deducted in the determination of taxable income but not yet charged to earnings.

### 2. Adjustment for change in inventory valuation

Prior to 1975, the Company followed the practice of valuing its inventories of copper and zinc at estimated net realizable value (after making provision for all costs relating to the sale of these metals) and recognized the revenue from metal sales at the time of production rather than at the time of shipment to customers.

In 1975, in order to provide a more appropriate matching of revenue and cost of production, the Company adopted the lower of cost or estimated net realizable value for valuing its copper and zinc inventories and it began recognizing revenue from these metal sales at time of shipment to customers rather than at the time of production. Inventories of precious metals and cadmium, which are by-products of base-metal production, continue to be valued at estimated net realizable value.

The consolidated statement of earnings for the year ended December 31, 1974, has been restated to reflect this change and the balance of retained earnings at January 1, 1975, has been restated to reflect a reduction of \$832,000, representing the cumulative adjustment, net of related income taxes, required in respect of prior periods. The effect of this accounting change has been to restate sales of product, cost of sales, income taxes, net earnings and earnings per share for the year ended December 31, 1974, as follows:

	As previously reported	Adjustment for change in inventory valuation	As restated
(in thousands)			
Sales of product	\$202,327	\$ 14,883	\$217,210
Cost of sales	\$114,698	\$ 5,054	\$119,752
Income taxes	\$ 19,855	\$ 3,440	\$ 23,295
Net earnings	\$ 38,579	\$ 6,389	\$ 44,968
Earnings per share	\$ 3.88	\$ 0.64	\$ 4.52

Under generally accepted accounting principles in the United States, this change in method of inventory valuation would be accorded a different accounting

treatment than under the Canadian accounting principles followed by the Company. United States accounting principles require the cumulative effect of the change in inventory valuation on prior years' earnings to be reflected as a special charge in the statement of earnings of the current year, rather than as a restatement of prior years' earnings. Under United States accounting principles the Company's net earnings for the years ended December 31, 1975 and 1974 would have been reflected as follows:

	1975	1974
	(in thousands)	
Net earnings before cumulative effect of change in inventory valuation	<b>\$14,771</b>	\$38,579
Cumulative effect of change in inventory valuation (\$0.08 per share)	<b>832</b>	—
Net earnings	<b>\$13,939</b>	\$38,579

In addition to the above, generally accepted accounting principles in the United States would require footnote disclosure, on a pro forma basis, of earnings for the prior year recalculated on the new basis of inventory valuation. These are the same figures as those shown in the consolidated statement of earnings for the years ended December 31, 1975 and 1974.

### 3. Investments in other companies

	1975	1974
	(in thousands)	
Associated companies—see below	<b>\$66,826</b>	\$58,020
Other—at cost:		
Quoted (market value 1975—\$97,000; 1974—\$287,000)	<b>609</b>	609
Unquoted	<b>8,620</b>	8,484
	<b>9,229</b>	9,093
Less provision for future write-offs	<b>7,922</b>	5,743
	<b>1,307</b>	3,350
	<b>\$68,133</b>	\$61,370

The investment in associated companies at December 31, 1975, comprises the following:

	% of Common Share Ownership		Underlying Equity In Net Assets		(in thousands)
	1975	1974	1975	1974	
Terra Chemicals International, Inc.	—	29.9	\$ —	\$11,403	
Western Decalta Petroleum Limited	<b>35.7</b>	35.5	<b>17,480</b>	16,658	
Canadian Merrill Ltd.	<b>29.1</b>	23.1	<b>6,263</b>	5,683	
Inspiration Consolidated Copper Company	<b>18.0</b>	—	<b>21,297</b>	—	
Whitehorse Copper Mines Ltd.	<b>20.6</b>	20.6	<b>2,259</b>	2,298	
Lytton Minerals Limited	<b>33.9</b>	33.6	<b>1,513</b>	1,525	
Ambay Services Limited	<b>50.0</b>	50.0	<b>47</b>	—	
			<b>\$48,859</b>	\$37,567	

The unamortized excess cost over the underlying equity in the net assets at the dates of acquisition, amounting to \$17,967,000 (1974—\$20,453,000), is included in the investments in associated companies and is being written off against the Company's share of earnings therefrom, generally over a period of 20 years.

During the current year, the Company acquired the 18% interest in Inspiration Consolidated Copper Company, a United States integrated natural resources company, for approximately \$22,000,000 cash.

The percentage of common share ownership in Western Decalta Petroleum Limited and Canadian Merrill Ltd. may be increased, at the Company's option, to 43.7% and approximately 46%, respectively, through the conversion of debt securities held.

### 4. Property, plant and equipment

The following is a summary of property, plant and equipment at cost by major category:

	1975	1974
	(in thousands)	
Base-metals	<b>\$132,333</b>	\$125,489
Fertilizers and chemicals	<b>110,377</b>	49,201
Oil and gas	<b>145,188</b>	123,676
Other	<b>11,240</b>	10,857
	<b>399,138</b>	309,223

Less:		
Accumulated depreciation	<b>110,242</b>	79,968
Accumulated depletion	<b>34,099</b>	22,780
	<b>144,341</b>	102,748
	<b>\$254,797</b>	\$206,475

### 5. Long-term debt

Long-term debt comprises the following:

	1975	1974
	(in thousands)	
<b>Hudson Bay Mining and Smelting Co., Limited:</b>		
9% unsecured debentures due 1991	<b>\$ 23,115</b>	\$ 23,115
10½% unsecured debentures due 1995 (U.S. \$50,000,000)	<b>50,764</b>	—
9% note payable, due 1976-1980 (U.S. \$6,000,000)	<b>6,169</b>	—
<b>Francana Oil &amp; Gas Ltd.:</b>		
Bank production loans	<b>2,778</b>	3,354
Loan from an associated company (1975—U.S. \$2,666,000; 1974—U.S. \$4,000,000)	<b>2,617</b>	3,925
<b>Trend Exploration Limited:</b>		
Bank term loan (U.S. \$500,000)	<b>—</b>	496
<b>Terra Chemicals International, Inc.:</b>		
Bank term loan (U.S. \$4,000,000)	<b>4,100</b>	—
	<b>89,543</b>	30,890
Debt due within one year included in current liabilities	<b>3,118</b>	2,380
	<b>\$ 86,425</b>	\$ 28,510

(a) Under the trust indenture covering the 9% unsecured debentures, sinking fund payments sufficient to

retire \$800,000 of principal amount each year from 1977 to 1990, inclusive, are required. The Company has the option to redeem the debentures at prices ranging downward from 106.80% currently to 100% in 1988 and thereafter. Debentures redeemed through the operations of the sinking fund are callable at par.

(b) Under the trust indenture covering the 10½% unsecured debentures, sinking fund payments sufficient to retire U.S. \$3,330,000 of principal amount each year from 1981 to 1994, inclusive, are required. The Company has the option to redeem the debentures at prices ranging downward from 110.5% currently to 100% in 1990 and thereafter. Debentures redeemed through the operations of the sinking fund are callable at par.

(c) The 9% note payable is repayable in five annual instalments of U.S. \$1,200,000 commencing July 3, 1976.

(d) The bank production loans are repayable in monthly instalments of \$48,000, plus interest at rates approximating the bank prime rate. These loans are secured by an assignment of the subsidiary's interest in certain petroleum-producing properties.

(e) The loan from an associated company is interest-free and repayable in equal annual instalments of U.S. \$1,333,000.

(f) The bank term loan of Trend Exploration Limited was payable in monthly instalments of U.S. \$55,000 and was repaid in full during 1975.

(g) The bank term loan of Terra Chemicals International, Inc. is repayable in six equal semi-annual instalments of U.S. \$667,000 commencing April 30, 1978, and bears interest at ½ of 1% above the bank prime rate.

Interest and related expenses on long-term debt amounted to \$3,221,000 in 1975 and \$3,165,000 in 1974. After allowing for prepayments, sinking fund and principal payments over the next five years amount to \$3,118,000 in 1976, \$3,119,000 in 1977, \$3,176,000 in 1978; \$3,691,000 in 1979 and \$3,874,000 in 1980.

## 6. Capital stock

The authorized capital of the Company comprises 15,000,000 Class "A" and 15,000,000 Class "B" convertible common shares without par value.

The Class "A" and Class "B" shares are freely interconvertible at any time, on a one-for-one basis, at the option of the shareholder and rank equally in all respects, except that it is the Company's intention to pay tax-deferred dividends to the Class "B" shareholders out of 1971 capital surplus, as defined in the Canadian Income Tax Act. For Canadian income tax purposes, tax-deferred dividends are not taxable when received by the shareholder, but reduce the adjusted cost base of his shares for capital gains determination. At December 31, 1975, 5,061,639 Class "A" shares and 4,880,019 Class "B" shares were issued and fully paid.

During 1974, 225 shares were issued for \$6,000 cash under the Company's share option plans (Note 11).

## 7. Acquisition of subsidiaries

Effective July 1, 1975, the Company acquired 7% cumulative preferred shares with a par value of U.S. \$6,000,000 and a further equity interest of approximately 21% in an associated company, Terra Chemicals International, Inc., a manufacturer and distributor of fertilizers and chemicals in the midwestern United States, for \$21,706,000. This acquisition combined with the Company's previous interest resulted in Terra becoming a subsidiary of the Company. The consideration was satisfied by a U.S. \$6,000,000 9% note repayable in five equal annual instalments and the balance in cash.

Effective July 1, 1974, the Company, through a subsidiary, Francana Oil & Gas Ltd., and together with an associated company acquired approximately 70% of the shares of Trend Exploration Limited, a company with major producing oil and gas properties in Indonesia. This represented substantially all of the shares of that company not already owned by Francana. The cost of the acquisition of \$74,946,000 was financed as follows:

	(in thousands)
By working capital of the Company	\$14,444
By minority interests	56,577
By interest-free loan from associated company	3,925
	<b>\$74,946</b>

As a result of this transaction, Francana, 54.97% owned by the Company, increased its interest in Trend Exploration to 56.85%.

Both of these acquisitions have been accounted for by the purchase method and their accounts have been consolidated with those of the Company from the effective dates of acquisition. Prior to those dates these investments were accounted for by the equity method.

The following is a summary of the noncurrent assets and liabilities at the effective dates of acquisition of these subsidiaries:

	Terra 1975	Trend 1974
(in thousands)		
Property, plant and equipment less accumulated depreciation and depletion	\$36,097	\$81,529
Other assets	3,330	137
Noncurrent liabilities including minority interest	(28,417)	(111)
	11,010	81,555
Investment at effective date of acquisition (including equity in earnings)	17,037	9,099
Cost of acquisition greater (less) than working capital acquired (1975 - \$27,733,000; 1974 - \$2,491,000)	\$(6,027)	\$72,456

The excess of cost of the investments over the underlying equity in the net assets at the effective dates of acquisition (Terra, 1975 - \$7,802,000; Trend, 1974 - \$66,798,000) has been ascribed to property, plant and equipment. Such excess is being amortized against earnings on a unit-of-production basis in the case of Trend and on a straight-line basis over a period of 10 years in the case of Terra.

## 8. Cost of sales

Cost of sales includes the cost of outside purchases of concentrates for processing in the Company's metallurgical plants. These purchases amounted to \$49,280,000 in 1975 and \$48,625,000 in 1974.

## 9. Other income

This amount comprises the following:

	1975	1974
(in thousands)		
Share of earnings of joint venture	\$ 112	\$ 1,174
Interest income	2,621	3,392
Miscellaneous income	1,379	963
	<b>\$ 4,112</b>	<b>\$ 5,529</b>

## 10. Analysis of changes in working capital

	1975	1974
(in thousands)		
Increase (decrease) in current assets:		
Cash and short-term securities	\$(9,873)	\$(6,394)
Accounts receivable	27,328	(8,444)
Inventories:		
Metals and metal products	12,880	3,073
Fertilizers and chemicals	21,575	730
	<b>51,910</b>	<b>(11,035)</b>
Increase (decrease) in current liabilities:		
Accounts payable and accrued liabilities	12,003	3,878
Dividend payable	(1,989)	(4,971)
Loans from associated company	(5,254)	6,944
Income and other taxes payable	(7,657)	4,444
Notes payable	15,091	—
Long-term debt due within one year	738	1,804
	<b>12,932</b>	<b>12,099</b>
Increase (decrease) in working capital	<b>\$38,978</b>	<b>\$(23,134)</b>

## 11. Share option plans

Under the Company's Share Option Plans for Full-Time Officers and Key Employees, 368,000 unissued shares were reserved for granting of options at prices not less than 95% of the market value (full market value in the case of United States citizens) on the day the option is granted.

No options were granted or exercised during 1975. (In 1974 no options were granted but 225 options were exercised at \$27.01 per share.) Options on 8,610 shares terminated in 1975 (1974—1,430 shares).

As of December 31, 1975, 221,325 shares were available for future grants and 70,850 shares (18,510 for officers) granted December 14, 1972, were subject to outstanding options at \$19.65 per share until December 13, 1977.

## 12. Pension fund

The unfunded past service cost with respect to the Company's pension plans was approximately \$11,600,000 as at December 31, 1975 (1974—\$11,400,000), including vested benefits of approximately \$8,000,000 (1974—\$8,000,000) and is being funded over the next 13 years as recommended by the Company's actuarial consultants.

## 13. Foreign operations

**Indonesia:** A subsidiary of the Company is the operator for, and has a significant interest in, a joint venture involved in petroleum exploration, development and production in Indonesia. The crude oil produced is shared under the terms of a production-sharing contract with Pertamina (the national oil company of Indonesia). The Company's investment in the Indonesian operation at December 31, 1975, was approximately \$86,000,000 and is included in property, plant and equipment. In the opinion of management, reserves discovered to date are sufficient to enable the Company to recover its investment from future production.

Indonesian income taxes are determined under contract with the government and generally allow for deduction of all costs incurred, although certain of these costs are capitalized and amortized for financial reporting pur-

poses. Deferred Indonesian income taxes are not appropriate relative to these timing differences since additional future taxes will be met by increased allocations under the production-sharing contract.

**Mexico:** During 1974, the Company, through its investment in Lytton Minerals Limited, acquired an interest in certain mining properties in Mexico, the development of which is being investigated. The Company has undertaken to provide approximately \$5,000,000 towards Lytton's share of any proposed plan to develop these properties.

## 14. Contingencies

During 1973, an action was brought alleging infringement by the Company with respect to certain patents relating to the processing of potash. In the opinion of the Company and its counsel, the patents are not infringed and accordingly the Company has a good defence to the action on the merits.

The Company is contingently liable as guarantor for 50% of certain indebtedness of an associated company. The contingent liability was \$1,077,000 at December 31, 1975 (1974—\$1,039,000).

The Government of Saskatchewan has enacted legislation which enables the Government to acquire by purchase or expropriation some, or all, of the producing potash mines in the province. As the Company cannot currently determine whether any of its potash mining assets will be so acquired and, if so, the amount and terms of payment therefor, the Company is unable to predict any possible effects on its financial position.

## 15. Remuneration of directors and officers

As at December 31, 1975, the Company had 12 directors and 20 officers (17 officers in 1974); three of the officers are also directors. The aggregate remuneration paid to the directors and officers, as such, was as follows:

	1975	1974
Directors	\$ 65,000	\$ 55,000
Officers	<b>\$1,191,000</b>	<b>\$895,000</b>

## **16. Anti-inflation legislation**

The Company is subject to the anti-inflation regulations enacted by the Government of Canada, effective October 14, 1975, to provide for the restraint of profit margins, prices, dividends and compensation in Canada. Pending clarification of the many uncertainties of interpretation and implementation surrounding the legislation, the directors and officers of the Company are of the opinion that the Company has not violated any of the specified guidelines.

Under the present legislation the Company is not permitted to pay dividends in excess of \$2.10 per share in the 12 months ending October 13, 1976. Regulations relating to the restriction of dividends subsequent to that date have not yet been issued by the Government.

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## **Auditors' Report**

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To the Shareholders of  
Hudson Bay Mining and  
Smelting Co., Limited:

We have examined the consolidated statement of financial position of Hudson Bay Mining and Smelting Co., Limited and subsidiary companies as at December 31, 1975 and 1974, and the consolidated statements of earnings, retained earnings and changes in financial position for the years then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. We did not examine financial statements of a subsidiary which has been consolidated or of certain investments which have been accounted for using the equity method of accounting, the earnings from these entities comprising approximately 51% and 16% of the consolidated net earnings for the years 1975 and 1974, respectively. The financial statements with respect to the aforementioned subsidiary and investments were reported upon by other auditors and our opinion, insofar as it relates to the amounts included for such entities, is based solely upon the reports of the other auditors.

In our opinion, based upon our examination and the reports of other auditors, these consolidated financial statements present fairly the financial position of the companies as at December 31, 1975 and 1974, and the results of their operations and the changes in their financial position for the years then ended, in accordance with generally accepted accounting principles applied on a consistent basis after giving effect to the retroactive change in basis of valuation of copper and zinc inventories, with which we concur, from an estimated net realizable value basis to a lower of cost or net realizable value basis as explained in Note 2 to the financial statements.

**Deloitte, Haskins & Sells**  
Chartered Accountants

Toronto, Canada  
March 5, 1976

## Financial review and Management's discussion and analysis of the consolidated statement of earnings

**Net earnings** for 1975 amounted to \$14,771,000, compared with 1974 restated earnings of \$44,968,000. This major reduction in earnings is due mainly to a decrease in zinc sales and a significant decline in copper prices. In our chemical and fertilizer division, a three-month shutdown at our Sylvite of Canada potash plant due to a fire, and the increased level of taxes further reduced net earnings for the year.

**Dividends declared** for 1975 totalled \$13,918,000, or \$1.40 per share, compared with \$15,907,000 or \$1.60 for 1974. The regular quarterly dividend of 40¢ a share

was reduced to 20¢ a share in the fourth quarter of 1975.

**Working capital** increased by \$38,978,000 during 1975, from \$19,728,000 at the end of 1974 to \$58,706,000 at the end of 1975. This increase is a direct result of the long-term financing during the year by the Company and Terra Chemicals International, Inc.

**Two major investments** were made in 1975. In July, a further 21% equity interest, together with additional preference shares, in an associated company, Terra Chemicals International, Inc., were acquired for \$21,706,000. The total equity interest now is 51%, resulting in this company being a subsidiary and having its financial results included on a consolidated basis for the first time, effective July 1, 1975. Full details of the acquisition are set forth in Note 7 to the financial statements.

### Dividends and market price ranges, by quarters

		Market range									
		Toronto Stock Exchange(2) (Principal market, Cdn \$)				New York Stock Exchange (U.S. \$)					
		Dividends(1)	High	Low	High	Low	High	Low	High	Low	
1975		A	B	— A —	— B —	— A —	— B —	— A —	— B —		
1st		40¢	40¢	18 1/4	13 1/8	17 3/4	14 1/2	17 3/4	13 3/8	17 1/2	13 3/4
2nd		40¢	40¢	20	17 1/2	19 5/8	18 1/8	19 1/4	17 3/8	19 5/8	17 1/4
3rd		40¢	40¢	21 1/2	17	20 1/8	17 5/8	21	16 1/2	20	16
4th		20¢	20¢	18 3/4	14 3/4	18 1/4	15 1/4	18 1/4	14 1/2	17 1/4	14 1/4
1974											
1st		40¢	—	27 3/8	24 1/4	—	—	29 1/4	24 3/4	—	—
2nd		40¢	40¢	25 1/4	18 1/2	20 5/8	20 3/8	26	19 3/8	—	—
3rd		40¢	40¢	21	13 7/8	20	14 7/8	21 1/2	13 3/4	20 3/4	14 1/4
4th		40¢	40¢	17 3/4	12 1/4	16 1/4	12 3/4	18 1/8	12 1/2	17 1/4	12 1/4

(1) The Company's common shares were reclassified as Class "A" and Class "B" convertible common shares and commenced trading on three stock exchanges on May 27, 1974.

(2) The Company's shares are traded on the Montreal, New York and Toronto Stock Exchanges.

Also during 1975, the Company acquired an 18% interest in Inspiration Consolidated Copper Company, an integrated natural-resources company in the United States, for approximately \$22,000,000.

**Capital expenditures** during 1975 totalled \$47,199,000, an increase of \$3,560,000 over 1974. A total of \$24,070,000 was spent by Francana Oil & Gas Ltd. and its subsidiaries, Trend International Limited and Trend Exploration Limited, primarily in Indonesia. Approximately \$18,217,000 was spent in the Flin Flon - Snow Lake area on further modernization and environmental programs and on underground mine development. Capital additions in the fertilizer and chemical division totalled \$4,753,000.

**Significant increases** in sales and expenses which occurred in both 1975 and 1974 are largely due to the consolidation of Terra Chemical accounts commencing July 1, 1975, and the consolidation of Trend Exploration Limited accounts commencing July 1, 1974. Prior to those dates, the Company's interest in the earnings of those companies was accounted for by the equity method and therefore equity earnings figures in both years have been affected accordingly. Details of significant changes outlined below exclude the effect of the Terra Chemicals and Trend Exploration consolidation.

**Net sales** from base-metal operations declined by approximately \$34,000,000 in 1975 after a substantial increase in 1974. The increase in 1974 was due in large part to increased metal prices. However, the decline in the copper price which commenced in the last half of 1974 continued during 1975. In addition, zinc sales were sharply reduced in 1975 due to market conditions. Potash price improvements during 1974 remained throughout 1975.

**Cost of sales increased** in both 1975 and 1974, primarily in our base-metal operations. Although a portion of the cost increases is due to an increased percentage of concentrates being purchased, actual production costs have continued to increase because of substantial increases in labor and material. Unit costs at our Flin Flon - Snow Lake operation are at a level whereby, under present market conditions, base metals are now a marginal operation.

**Exploration expenditures**, which increased in 1974, decreased in 1975 due to reduced activity in Manitoba and Saskatchewan.

**Increased general administration expenses** in both 1975 and 1974 were due to increased staff requirements and related costs at Head Office.

**Interest expense increased** substantially during 1975 due to the increased borrowings required to finance the major investments and capital expenditures made during the year.

**Other income**, after increasing substantially during 1974 due to earnings from the Whitehorse Copper joint venture and increased interest income, decreased by \$1,417,000 in 1975 because of lower earnings from both sources. The lower income from the joint venture is a direct result of lower copper prices.

**Income taxes, mining taxes and royalties increased** dramatically in 1974 by \$14,980,000 primarily because of the termination of the three-year tax-exempt period for new mines, together with the increased royalty and other resource taxes imposed by the provincial governments in the areas of our base-metal and potash operations. Lower income taxes in 1975 resulting from the decrease in base-metal earnings were offset by further increased provincial taxes on the potash operation.

**The provision for future write-offs of investments** includes an amount of \$1,800,000 representing the advances made to an associated company, Minsearch Surveys Limited, for research and development of an airborne biogeochemical exploration system.

#### Comparative financial analysis

1975      1974

(in thousands)

Revenue.....	\$ 259,634	\$ 217,210
Earnings before taxes and minority interest.....	\$ 63,290	\$ 83,210
Funds available.....	\$ 150,827	\$ 175,254
Use of funds.....	\$ 92,121	\$ 155,526

#### Supplementary financial information (in thousands)

	1975	1974	1973	1972	1971
<b>Summary of operations</b>					
Net sales	\$ 259,634	\$ 217,210	\$ 162,572	\$ 101,790	\$ 54,791
Equity earnings	4,285	9,129	1,566	—	—
Other income	4,112	5,529	5,360	2,784	2,148
	<b>268,031</b>	231,868	169,498	104,574	56,939
Cost and expenses	202,556	148,118	112,019	89,618	55,219
Taxes and royalties	36,625	33,939	14,184	3,077	(1,430)
Other deductions	14,079	4,843	2,402	270	1,224
	<b>253,260</b>	186,900	128,605	92,965	55,013
Earnings before extraordinary items	14,771	44,968	40,893	11,609	1,926
Wellgreen Mine (loss) recovery	—	—	2,704	(8,518)	—
Net earnings	<b>\$ 14,771</b>	\$ 44,968	\$ 43,597	\$ 3,091	\$ 1,926
<b>Other financial data</b>					
Capital expenditures	\$ 47,199	\$ 43,639	\$ 18,177	\$ 12,282	\$ 21,978
Investment expenditures	24,141	86,940	41,137	3,160	1,609
Working capital	58,706	19,728	42,862	36,089	28,641
Total assets	517,770	402,691	299,076	211,008	209,881
Capital employed	445,782	343,635	242,120	188,837	197,027
Shareholders' investment	217,318	216,465	187,398	140,554	144,686
Dividends	13,918	15,907	19,253	7,233	4,520
Earnings per share	1.49	4.52	4.67	.34	.21
Dividends per share	1.40	1.60	2.00	.80	.50
<b>Lines of business information</b>					
Net sales:					
Base metals	\$ 125,632	\$ 159,447	\$ 132,628	\$ 84,569	\$ 40,391
Fertilizers and chemicals	73,548	33,782	20,132	9,760	7,589
Oil and gas	55,172	18,423	4,006	3,885	2,821
Other	5,282	5,558	5,806	3,576	3,990
	<b>\$ 259,634</b>	\$ 217,210	\$ 162,572	\$ 101,790	\$ 54,791
<b>Earnings before taxes and minority interest:</b>					
Base metals	\$ (249)	\$ 42,067	\$ 45,708	\$ 13,991	\$ (1,971)
Fertilizers and chemicals	31,571	25,889	7,559	(223)	1,042
Oil and gas	32,843	14,252	1,955	1,245	1,386
Other	(875)	1,002	407	(57)	450
	<b>\$ 63,290</b>	\$ 83,210	\$ 55,629	\$ 14,956	\$ 907

NOTE: The above table has been adjusted to reflect the changes in inventory valuation.

## **Operating properties, subsidiaries and major holdings**

*(Ownership is 100% unless indicated otherwise.)*

### **METALS**

#### **Canada**

(Flin Flon-Snow Lake area)

Anderson Lake Mine  
 Centennial Mine  
 Chisel Lake Mine  
 Flin Flon Mine and metallurgical plants  
 Ghost Lake Mine  
 Osborne Lake Mine  
 Schist Lake Mine  
 Stall Lake Mine  
 Westarm Mine  
 White Lake Mine  
 Lytton Minerals Limited (33.9%)  
 Stikine Copper Limited (31.7%)  
 Whitehorse Copper Mines Ltd. (20.6%)

#### **United States**

Inspiration Consolidated Copper Company (18%)

#### **Mexico**

Compania Cuprifera La Verde, S.A. (Lytton holds 48%)

#### **Service companies**

Beaver Exploration Company  
 Churchill River Power Company Limited  
 Hudson Bay Air Transport Limited  
 Hudson Bay Exploration and Development Company Limited  
 Minsearch Surveys Limited (25%)  
 Northern Power Limited

### **OIL AND GAS**

#### **Canada**

Canadian Merrill Ltd. (29.1%)  
 Francana Oil & Gas Ltd. (54.9%)  
 Western Decalta Petroleum Limited (35.7%)

#### **United States**

Trend Exploration Limited  
 (Francana Oil & Gas holds 56.8%)

### **Indonesia**

Petromer Trend Division of Trend Exploration Limited

#### **Service companies**

Barringer Hydrocarbons Limited (15%)

### **FERTILIZERS AND CHEMICALS**

#### **Canada**

Francana Minerals Ltd. (60%)  
 Sodium Sulphate (Saskatchewan) Ltd.  
 (Francana Minerals holds 100%)  
 Sylvite of Canada Division

#### **United States**

Sylvite Sales Inc.  
 Terra Chemicals International, Inc. (51%)

### **MANUFACTURING**

#### **Canada**

Hudson Bay Diecastings Limited  
 Zochem Limited

## **Principal addresses**

#### **Mine offices**

Hudson Bay Mining and Smelting Co., Limited  
 Flin Flon, Manitoba R8A 1N9  
 General manager: S. W. Harapiak

Sylvite of Canada Division of Hudson Bay Mining and Smelting Co., Limited  
 P.O. Box 270, Rocanville, Saskatchewan S0A 3L0  
 General manager: F.J. Greeves

#### **Exploration offices**

Hudson Bay Exploration and Development Company Limited  
 P.O. Box 28, Toronto-Dominion Centre, Toronto, Ontario M5K 1B8  
 General manager: R.B. Cairns

#### Unit 52

2 Thorncliffe Park Drive, Toronto, Ontario M4H 1H2  
 Manager, Eastern exploration: P.L. Martin

#### Flin Flon, Manitoba R8A 1N9

Manager, Central exploration: J.G. Bragg

P.O. Box 49085-555 Burrard St., Bentall Centre Tower No. 2  
 Vancouver 1, British Columbia V7X 1G6  
 Manager, Western exploration: R.A. Freberg

#### **Subsidiary companies**

Francana Minerals Ltd.  
 670 Bank of Canada Bldg., Regina, Saskatchewan S4P 0M8

Francana Oil & Gas Ltd.  
 630-6th Ave. S.W., Calgary, Alberta T2P 0S8

Hudson Bay Diecastings Limited  
 P.O. Box 1050, Brampton, Ontario L6T 1E9

Terra Chemicals International, Inc.  
 P.O. Box 1828  
 Sioux City, Iowa 51102

#### Zochem Limited

P.O. Box 1120, Brampton, Ontario L6V 2L8

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